with increased pressure, after which the paper will peel off, leaving the composition as well as the drawing on the stone. Wash off the former, and rub the drawing over with a strong coat of gum arabic water. Lay it till cold, and print.

JOSEPH NETHERCLIFT.

No. IV.

PLASTER CASTS FROM MEDALS.

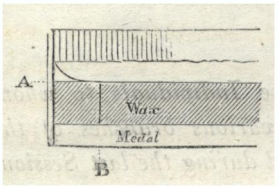
The following Communication, on making Plaster Casts from Medals, was received from Mr. W. KELSALL, Engraver, 8, Clarendon Street, Somers Town, to whom the thanks of the Society were voted for the same.

THE substances most commonly used for forming moulds from medals and other small works of art, are sulphur, plaster of Paris, and wax. The first of these is, perhaps, in most general use, from the ease with which the mould is made. It is, however, objectionable, as it invariably injures the medal, and, besides, seldom brings the work up with a sharp edge, occasioned by the oil used on the surface of the medal to prevent adhesion; it may also, in some measure, be caused by the cooling of the sulphur before it has opportunity to run into the finer parts of the work. As it is necessary to oil the mould before an impression can be made, it is very rare that a good one can be procured.

Plaster of Paris, though very useful for large casting, is, according to the usual practice of oiling, still more unfit than sulphur for small subjects, as it requires to be thoroughly saturated with oil, and then it is by no means certain that your cast will not stick to the mould. The only way of using it to advantage is by dipping it, when thoroughly dry, in melted wax, and allowing it to be fully saturated; take it out, and, when cold, it is fit for casting from, requiring only to have a thin wash of wax, dissolved in spirit of turpentine, applied instead of oil before use. This should be allowed to dry, which it does in about fifteen minutes, and it will then bear the wet plaster to be pushed in with a camel's hair pencil; (a very necessary operation in medal casting, to expel the air, which otherwise lodges in the deeper parts of the mould, and causes imperfections). When this method is properly attended to, the cast leaves easily, and is nearly as good as one from a wax mould.

Wax forms a perfect mould, if the operator has the skill to manage properly. It is, without doubt, the most difficult to procure good; but, when once obtained, it lasts, and is cast from without trouble. The following is the best method to get it good:—Fasten an edge round the medal, which may be made of paper, pasteboard, or, what is better, the lead which lines the tea-chests: the strip should be about 3-4ths of an inch in width; and be careful that it is put on close, otherwise the wax will find its way out. The wax should be melted in a cup placed in boiling water, as it keeps the heat regular, and gives a proper degree of fluidity. The surface of the medal should be quite clean, neither oil nor any thing else being required. Warm it slightly (blood-heat is sufficient), to prevent the wax from chilling as it is poured on; then

pour on the wax as quick as possible; as it cools, pass the point of a knife horizontally along the wax which has flowed up at the edge, to cut through it (as shewn at A), otherwise the wax will be likely to crack at B all the way round. When the wax is perfectly cold, strip off the edge; and if the mould does not separate easily, put the fire-shovel over the fire, let it get hot, then put the medal on it, with a piece of paper underneath to prevent rubbing; try every four or five seconds, by putting to the face, what degree of heat it has acquired. When the medal feels slightly warm, try, and, if it does not separate, warm it till it does. Great care in this part of the process is necessary, as without it the mould may melt, and thus be spoiled; but it frequently saves, if well managed, many moulds that would otherwise be lost.



To cast from a wax mould requires only to surround it with an edge, and pour on the plaster, taking care to push it well in with a camel's hair pencil. In mixing the plaster, the quantity is always regulated by the water; keep adding until the plaster reaches the top, then stir, and not before, and it is always the proper degree of thickness. It should remain on until properly set, which is in about fifteen minutes: no attempt ought to be made to separate it in less time.